Fluid Leak Detection Plan

Date: 11/10/2023

Location: OGDP SKR 698-10-BV / SKR 698-10-BV Pad

Legal Description: Tract 72, SWSW of Section 10 & NWNW of Section 15, Township 6 South, Range 98 West, 6th P.M., Garfield County, Colorado

Location Information

This document provides site-specific information for the SKR 698-10-BV (Skinner Ridge) Pad (referred to as the "Pad") located within OGDP SKR 698-10-BV. A pre-application meeting with Garfield County, CDPHE, ECMC, CPW, and Chevron was held on October 12, 2023. This application will be an amendment to the existing SKR-66S98W/10 SWSW Pad, permitted with ECMC under location ID #336056. This Pad was initially permitted for the drilling and completion of 22 wells; however, those wells were never drilled. Instead, the location was utilized as the Skinner Ridge Storage Facility, permitted by both ECMC, under location ID #447846, and Garfield County, under permit LIPA 6428.

The information in this document relates specifically to the time during the construction, drilling, completion, and production of the two (2) proposed horizontal wells on the well pad portion of the location and the construction and operation of the facility portion of the location, which will receive production from the two wells. Additionally, a pilot hole for geothermal testing will be drilled in one of the wells, but the pilot hole will be plugged prior to drilling the horizontal leg of the well.

The existing location is located off Garfield County Road 211 (Clear Creek Road) approximately 16.7 miles northwest of De Beque, Colorado. The Pad lies on Tract 72, and is situated on two sections, the SWSW of Section 10 and the NWNW of Section 15, Township 6 South, Range 98 West, 6th P.M. zoned Resource Lands per Garfield County.

The existing Skinner Ridge Storage Facility disturbance area is 6.2 acres, and an additional 0.7 acres of disturbance is proposed for construction of stormwater detention ponds and drainage channels at the SKR 698-10-BV Pad. The working pad surface (WPS) will be 3.8 acres. The Pad disturbance area will be reduced to 2.3 acres during interim reclamation. The Pad is located on Garfield County Parcel 213732100008 owned by Chevron U.S.A., Inc. The location is currently used as a storage yard and all storage equipment and facilities will be relocated prior to drilling the proposed wells.

The wells on the SKR 698-10-BV Pad will produce to the proposed production facility portion of the location and be tied into Chevron's existing Central Production Facility (CPF) via a proposed gas and liquids line. Proposed equipment on the Pad will include separators, pigging stations, a gas meter, pipe skid, an instrument air skid, a skid drain vault, a chemical injection skid, a communication tower, solar skids, a maintenance tank, heat trace equipment, a transformer or electric generators, switchracks, and a battery box. A temporary MLVT, located on the nearby Skinner Ridge-66S98W/22NENW Pad (Location ID# 324358), will be utilized for completion operations.

Phase	Duration (days)	Estimated Start Date
Construction (Daylight Only)	10 days	2nd Quarter 2024
Drilling	80 days	3rd Quarter 2024
Completion	23 days	3rd Quarter 2025
Flowback	N/A	Flowing back directly to permanent facility
Production	30 years	3rd Quarter 2025
Interim Reclamation (Daylight Only)	60 days	2nd Quarter 2026

Potentially Impacted Parties

The Working Pad Surface (WPS) of the SKR 698-10-BV Pad is within 2,000 feet of zero (0) Residential Building Units (RBUs), zero (0) High Occupancy Building Units (HOBUs), and zero (0) Designated Outside Activity Areas (DOAAs). The Pad is located within a Disproportionately Impacted Community (DIC).

The location is within ECMC designated High Priority Habitat (HPH) per rule 1202.d for Elk Winter Concentration Area and Elk Severe Winter Range and rule 1202.c for Aquatic Sportfish Management Waters.

Drilling and Completion Fluids Procedures and Schedules

Monitoring

- A closed–loop system will be used for drilling operations as required by Rule 408.a.
- Chevron will use SCADA to continuously monitor line pressures, flow rates, temperature, and open and closed valve positions. Any irregularities indicating a leak or change in production of oil, water, or gas will trigger immediate action by the SCADA system to shut-in the well/facility until troubleshooting and/or repairs are completed.

Inspection

- All on-site facilities shall be subjected to regularly scheduled instrument-based leak detection and repair (LDAR) inspections.

Testing

- Chevron will utilize volumetric testing to identify and locate leaks. This involves measuring the liquid volume which must be added or removed from a system to maintain constant pressure; volume changes unexplained by thermal expansion/contraction will indicate potential leaks.

Maintenance

- Chevron utilizes additional engineering controls, which may include use of appropriate materials, corrosion inhibitors, protective coatings, and cathodic protection techniques to minimize the potential for fluid leaks.

Produced Fluids Procedures and Schedules

Monitoring

- Routine site visits will be made by lease operators (aka pumpers) to the well pad for maintenance and inspection. Periodic site inspections will be conducted by third party environmental contractors to look for any signs of potential leaks. Infrared surveys will be used to identify any leaks coming from the flowlines on a regular basis. New flowlines will be hydrotested to manufacturer's recommended levels before being placed into use.
- Chevron will use SCADA to continuously monitor line pressures, flow rates, temperature, and open and closed valve positions. Any irregularities indicating a leak or change in production of oil, water,

or gas will trigger immediate action by the SCADA system to shut-in the well/facility until troubleshooting and/or repairs are completed.

Inspection

- Flowlines will be inspected per ECMC 1100 regulations.
- Infrared surveys will be used to identify any leaks coming from the flowlines on a regular basis.

Testing

- New flowlines will be hydrotested to manufactures recommended levels before being placed into use.
- Pressure testing of flowlines will be conducted on an annual basis.
- Documented Audible, Visual, and Olfactory (AVO) inspections and optical gas imaging surveys will be conducted regularly by a third-party specialist.

Maintenance

- If a leak is discovered or suspected, the well will be shut-in, and the line will be hydrotested. If hydrotesting confirms a leak, the well will remain shut-in while the leak is located and repaired. The well will be brought back online after the line has passed hydrotesting.

Record Keeping

Spill response includes notifications, reporting, response actions, remediation, and corrective actions. Waste is properly classified as E&P or non-E&P wastes. For E&P waste, all spills greater than 1 barrel (outside containment) or greater than 5 barrels (inside containment) will be reported to the ECMC using a Form 19.

Should remediation be required, a Form 27 will also be submitted. Spills related to non-E&P waste will be managed in accordance with CDPHE and EPA regulations depending on the volume spilled. Chevron tracks and cleans up all spills, including those that are not reportable. Chevron documents the monitoring process, and copies of inspection and maintenance logs are available upon request.

Records of inspection performed per 40CFR112 will be kept according to the procedure set forth in Chevron's written Records Retention Policy, and copies of these records will be kept with the SPCC Plan for a period of three (3) years. Per ECMC rule 206.f.(1), Chevron will maintain and keep all records, reports, and underlying data required by Commission's Rules for a period of five years, including those relating to spills and remedial actions.

Site-Specific BMPs

- Stormwater channels will be constructed topographically downgradient of the working pad surface and routed to detention ponds to prevent offsite migration of sediment or contaminants into nearby surface water features. The channels and ponds will help contain a potential on-site release and prevent contamination of un-plated soil. Construction details for the channels and detention ponds are provided within the site-specific Stormwater Management Plan.

- The surface of the location will be plated with 3-5 inches of compacted road base aggregate that will deter releases from easily seeping into the soil.

- During drilling and completion operations, a temporary impermeable layer (e.g., synthetic, geosynthetic, cement-modified soil) will be utilized under equipment to provide an additional layer of protection against spills. Secondary containment devices, such as duck ponds or equivalent type products, will be used to protect soils under any pipe connections or equipment that carry, mix, or could possibly leak fluids or chemicals.

- Audible, Visual, and Olfactory (AVO) inspections of the facility will be conducted regularly by Chevron. Any valve or fitting that is found to be ineffective will be repaired immediately, or well shut-in procedures will be implemented.

- The location will be equipped with remote monitoring and shut-in capabilities.

- All flowlines will be designed/constructed/tested to ASME B31.4 and API 1104 standards. Only materials with Material Test Reports (MTRs) provided by the pipeline supplier will be used in the construction of the flowlines.

- No pits will be used on location; therefore, pit level indicators will not be used on location.

- Spill prevention and response will continue to be addressed in training of employees and contractor personnel on at least an annual basis.